GM Techtronics

SH273AX
SH274AX

Contact detector

INSTALLATION MANUAL

Updated for e-Nova applications

DAITEM

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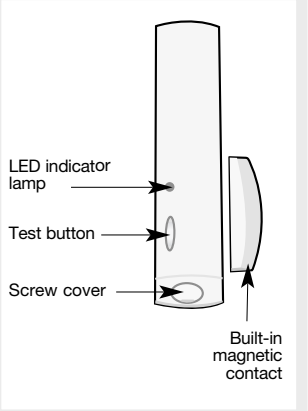
1. Introduction

IMPORTANT
- **Some functions are only available with versions 2.0.0 or later (press # 5 0 3 # # on the control panel keypad to check the version).**
- **The operating differences with former ranges are described in the compatibility booklet available in the Daitem installers section at www.daitem.co.uk.**

The **contact detector** is used to protect openings such as doors & windows. It is fitted with a built-in magnetic contact (reed switch).

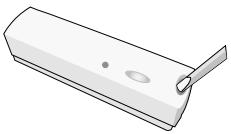


2. Preparation

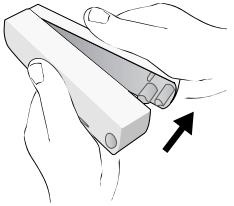
Recommendations
The user must not attempt to access the siren's internal parts, except areas described in this manual. If the user does access these parts, the product guarantee will be considered null and void and DAITEM shall not be held responsible for any problems. Touching the siren's internal parts and/or electronic components can damage the product. Furthermore, the siren is designed in such a way that these parts and components do not need to be accessed for operation or maintenance purposes.

2.1 Opening

1. Loosen the screws using a cross-head screwdriver.



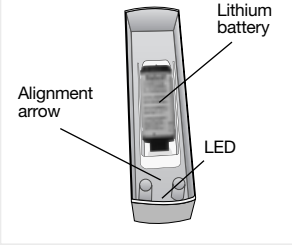
2. Unclip the base plate cover.



Guarantee sticker: remove the pre-cut part of the sticker and stick it to the guarantee certificate in the user manual supplied with the control panel. If you are adding the siren to an existing system, use the guarantee sticker provided with this product.

2.2 Power supply

The lithium battery pack is clipped into position (see diagram below). An arrow indicates which way to connect it.



When switched on the detector performs a self-test: the indicator lamp briefly lights up.

3. Programming

During recognition programming, the product to be programmed for use with the control panel does not need to be placed next to it. In fact, we recommend you place the product at a short distance from the control panel (at least 2 meters away).

Programming enables contact detectors to be recognised by the control panel.

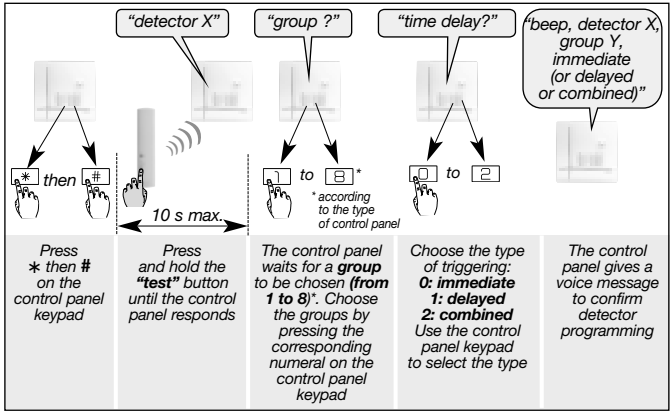
1. To programme contact detectors the **control panel must be in installation mode**. If it is not, you will require the user's master code, press:

[ ][ ][ ][ ] [#] [2] [#] [#]
master code

then press:

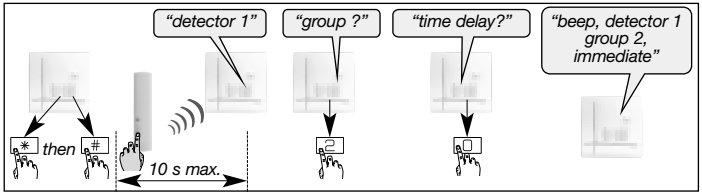
[ ][ ][ ][ ] [#] [3] [#] [#]
engineer installer code

2. Programme the device as follows:


"detector X"
"group ?"
"time delay?"
"beep, detector X, group Y, immediate (or delayed or combined)"
[*] then [#]
10 s max.
[1] to [8]*
* according to the type of control panel
[0] to [2]
Press ∗ then # on the control panel keypad
Press and hold the "test" button until the control panel responds
The control panel waits for a group to be chosen (from 1 to 8)*. Choose the groups by pressing the corresponding numeral on the control panel keypad
Choose the type of triggering: 0: immediate 1: delayed 2: combined Use the control panel keypad to select the type
The control panel gives a voice message to confirm detector programming

IMPORTANT: the control panel indicates an error by emitting 3 short beeps. When this happens programming should be carried out again.

• Example: programming of **1st detector** allocated to **Group** 2 with **immediate** triggering.



4. Installing

IMPORTANT: make sure there is a distance of at least 2 meters between each product, except between 2 detectors.

4.1 Choosing the best place

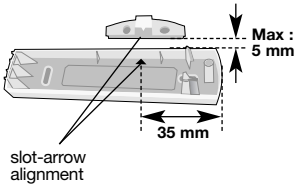
The contact detector must be placed:
- inside the protected area,
- preferably on the door frame of the entrance to be protected at least 1 m above ground level,
- far away from any sources of interference (electricity meter, metallic frame, etc.),
- on a flat surface.

IMPORTANT: when the detector is fixed to a metal support, insert a 20 mm thick wooden or plastic spacer between the base and the metal frame.

4.2 Fixing method and installing the magnet holder

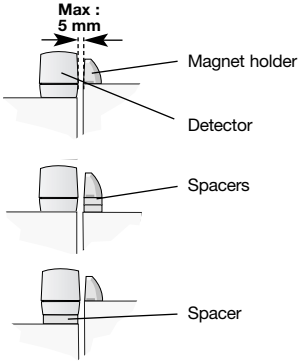
Fix the back plate to the wall using 2 screws suitable for wall fixing. When the entrance is closed the magnet holder must be positioned opposite the built-in contact less than 5 mm away from it.

1. Align the vertical slot on the magnet holder with the arrow located on the base of the detector.



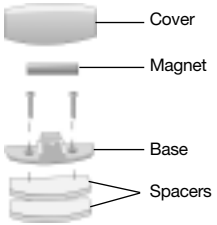
IMPORTANT: the parts must be laterally aligned and their height adjusted for the detector to operate correctly.

2. Adjust the height of the magnet holder according to the diagrams below.

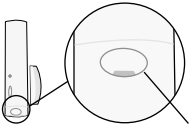


If necessary use the spacer supplied for the magnet holder or position a spacer below the normally closed detector.

3. Fix the magnet holder base, place the magnet inside the cover and clip it to the base.



4. Clip and then screw the detector to its base. Fit the screw head plug (supplied with the bunch of plastic parts for the magnet holder) to the cover.



Screw cover

Overview of opening and closing distances between the contact detector and the magnet used by the built-in contact to analyse any change in entrance status.

Movement	Built-in contact opening and closing distances				
	Contact status	Wooden support		Soft iron support	
Spacing					
	opening	23 mm		22 mm	
	closing	11 mm		11 mm	
Vertical sliding					
	opening	34 mm	24 mm	24 mm	19 mm
	closing	20 mm	9 mm	15 mm	8 mm
Horizontal sliding					
	opening	15 mm	12 mm	15 mm	12 mm
	closing	9 mm	7 mm	8 mm	6 mm

To unclip the magnet holder cover, insert a small flat-headed screwdriver into the slot provided and turn.

5. Testing

The contact detector has a “test” mode for testing:

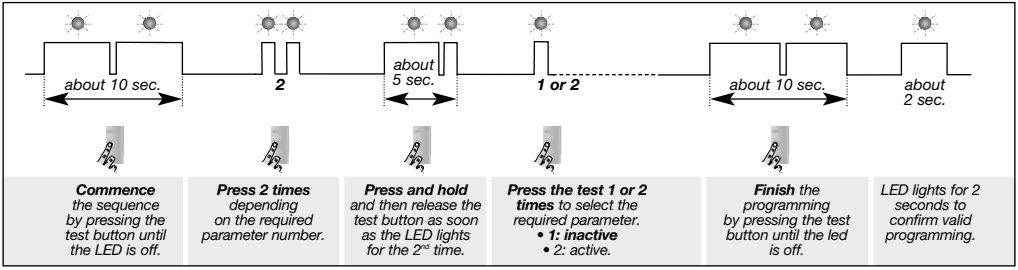
- **the battery:** the LED indicator lamp lights up when the test button is pressed to indicate the battery is working correctly,
- **detection:** the LED indicator lamp lights up when the contact changes status,
- **the radio link:** see § on Checking the radio links described in the control panel manual.

IMPORTANT: the control panel must be in installation mode for testing.

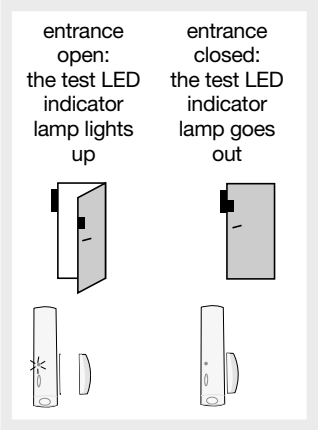
To test the detector:

- press the test button and the detector changes to **test mode** for about **90 sec.** After this period the detector automatically returns to normal operating mode,

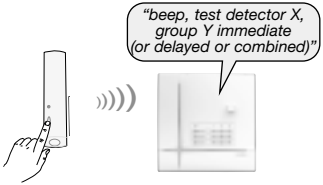
In accordance with the new functional requirements of EN50131-2-6, the LED is factory defaulted to be Inactive in Test Mode. To change this parameter, programme:


about 10 sec.
2
about 5 sec.
1 or 2
about 10 sec.
about 2 sec.
Commence the sequence by pressing the test button until the LED is off.
Press 2 times depending on the required parameter number.
Press and hold and then release the test button as soon as the LED lights for the 2nd time.
Press the test 1 or 2 times to select the required parameter.
• 1: inactive
• 2: active.
Finish the programming by pressing the test button until the led is off.
LED lights for 2 seconds to confirm valid programming.

- check detection of protected entrance opening and closing:



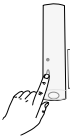
Pressing on the button for more than 1 sec. causes the control panel to give a **"Test"** message when the panel is in **test** or **installation mode**.



6. Maintenance

6.1 Battery low indication

The control panel indicates when the contact detector's battery is low.
To check whether there is a problem with the detector battery, press on the detector's test button.



If the test LED indicator lamp no longer lights up, the lithium battery should be replaced.

6.2 Changing the battery

To change the battery:

1. switch the control panel to installation mode and ask the master user to press:

[ ][ ][ ][ ] [#] [2] [#][#] then press: [ ][ ][ ][ ] [#] [3] [#][#]

master code — engineer installer code

2. open the detector casing (see § on Opening),

3. unclip the lithium battery pack,

4. wait 2 min. before replacing the flat lithium battery,

5. close the detector,

6. switch the control panel back to user mode, press:

[ ][ ][ ][ ] [#] [1] [#][#]

engineer installer code

IMPORTANT: the detector's configuration is saved when the battery is changed.

- **The lithium battery pack must be replaced by the same type of pack with the same technical characteristics, i.e. (3 V).**
- **We advise you to use the DAITEM BatLi31 pack available in the catalogue in order to guarantee individual safety and equipment reliability.**
- **Dispose of the waste lithium power pack in an appropriate recycling bin.**

Waste processing of electrical and electronic devices at the end of their service life (Applicable in European Union countries and other European countries with a waste collection system). Used on products or product packaging, this symbol indicates that the product must not be thrown out with household waste. It must be taken to a waste collection point for electrical and electronic product recycling. When you make sure that this product is disposed of in the most appropriate manner, you are helping to protect the environment and human health. If you would like additional information concerning the recycling of this product, please contact your town/city council, nearest waste collection centre or the shop where you bought the product.

7. Technical data

Specifications	Contact detector
Built-in magnetic contact	1
Environment	building interior
Power supply	DAITEM lithium battery (BatLi31 - 3 V)
Battery life	5 years in normal conditions of use
Radio links	TwinBand® 400/800 MHz
Test button	programming, battery and detection test
LED Indicator lamp	1
Operating temperature	-10 °C to +55 °C
Anti-tamper & protection	• against opening and removal • against loop cutting
Degrees of mechanical protection	IP 31/IK 04
Dimensions L x W x H	108 x 26 x 30 mm
Weight (with battery)	60 g

To obtain advice when installing your system or before returning equipment, please contact the Daitem technical support team (see telephone number at the back of the alarm system installation manual) or check the web site at:

www.daitem.co.uk

A team of qualified technicians will advise you what to do.

DECLARATION OF CONFORMITY 13

Manufacturer: **Hager Security SAS**
Address: **F-38926 Crolles Cedex - France**

Product type: **Contact detector**
Trade mark: **Daitem**
We declare under our sole responsibility that the product to which this declaration relates is compliant with the essential requirements of the following directives:

- **R&TTE Directive: 99/5/EEC**
- **Low voltage directive: 2006/95/EC**
- **Directive ROHS: 2002/95/EC**

in compliance with the following harmonised European standards:

Products code	SH273AX	SH274AX
EN 300 220-2 V2.3.1	X	X
EN 50130-4 (95) + A1 (98) + A2 (2002)	X	X
EN 55022 & 55024 (2002)	X	X
EN 60950 (2006)	X	X
EN 301 489-1 V1.8.1	X	X

This product can be used in all EU, EEA Countries and Switzerland.

Crolles, 08.04.2013

Signature: Patrick Bernard
Director of Research and Development

Non-contractual document, may be modified without prior notice.

DAITEM

805350/A - 04.2013